# FISHERY INFORMATION PACKET FOR THE BRISTOL BAY RED KING CRAB FISHERY, 2001

by

Forrest R. Bowers

Regional Information Report[1] No. 4K01-47

Alaska Department of Fish and Game
Division of Commercial Fisheries
211 Mission Road
Kodiak, Alaska 99615

[1] The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished division reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

September 2001

## AUTHOR

Forrest R. Bowers is the Bering Sea and Aleutian Islands Area Shellfish Management Biologist, Alaska Department of Fish and Game, Division of Commercial Fisheries, P.O. Box 920587, Dutch Harbor, Alaska, 99692.

## TABLE OF CONTENTS

## LIST OF TABLES



## LIST OF FIGURES



## LIST OF APPENDICIES

## ABSTRACT

This fishery information packet is intended to provide a brief overview of the red king crab *Paralithodes camtschaticus* fishery occurring in Alaska Department of Fish and Game (ADF&G) King Crab Registration Area T (Bristol Bay). This packet provides information for the public and industry on area description, brief historic fishery review, and summary of current management practices and policies. Supplemental information is provided on gear requirements, registration, stand down provisions, and American Fisheries Act vessel side boards.

# INTRODUCTION

The red king crab fishery in the Eastern Bering Sea began with harvests by Japanese fishers in 1930. United States fishers entered the area with trawl gear in 1947. Effort and catches declined through the 1950s. A full-scale domestic pot fishery developed in the mid 1960s and harvest peaked in 1980 when 130 million pounds of red king crabs were landed. In that same year, the Alaska Board of Fisheries (BOF) established Bristol Bay as a separate registration area. Annual harvests have fluctuated dramatically over the course of this fishery, however, the area continues to sustain the largest red king crab fishery in Alaska.

## *Description of Registration Area T and Statistical Areas*

Registration Area T is bounded on the north by the latitude of Cape Newenham (58° 39' N lat.), on the south by the latitude of Cape Sarichef (54° 36' N lat.), on the west by 168° W long., and includes all waters of Bristol Bay (Figure 1).

King crab Registration Area T has no district, subdistrict, or section subdivisions. For catch reporting purposes, the area is divided into ADF&G statistical areas, each encompassing one degree of longitude by one half degree of latitude. All commercial removals of red king crabs, including deadloss, are reported to ADF&G in reference to these statistical areas (Figure 2).

## *Historical Fishery Perspective*

Following the record harvest of red king crabs from Bristol Bay in 1980, the stock declined sharply and the area was closed to king crab fishing for the 1983 season due to low stock abundance. Area T reopened in 1984 and harvest reached 20 million pounds by 1990. In 1994, the stock once again fell to levels which necessitated a fishery closure. The fishery was not opened for the 1994 and 1995 seasons. In 1996, the BOF adopted a revised harvest strategy aimed at improving the probability for stock rebuilding. Details of this revised harvest strategy are described below in the *Harvest Strategy and Guideline Harvest Level* section.

In 1992, the BOF adopted regulations restricting all participating vessels to a maximum of 250 pots, hoping to slow the pace of the fishery. To comply with federal law regarding application of pot limits in a nondiscriminatory manner, differential pot limits, based on vessel length were implemented in 1993. Differential pot limits provide vessels less than or equal to 125 feet in overall length a maximum of 200 pots and vessels in excess of 125 feet a maximum of 250 pots.

In the fall of 1996, Area T reopened to commercial fishing for red king crabs with a guideline harvest level (GHL) of 5.0 million pounds. The fleet exceeded the GHL by 70% with a harvest of 8.4 million pounds. As a result of this excessive harvest, the BOF called a special meeting prior to the 1997 fishery and adopted interim management measures intended to provide the department with additional tools for management of the fishery at low GHLs. These measures include variable pot limits based on the GHL level and number of participating vessels, pre-season registration requirements, and a regulation allowing baited gear to remain on the fishing grounds if a closure announcement was made with less than 24 hour notification to the fleet.

The 1997 fishery with a GHL of 7.0 million pounds was prosecuted under reduced pot limits and fishers were permitted to leave baited gear on the fishing grounds after the season closure. Despite these additional measures, harvest in the 1997 fishery was 8.7 million pounds. In 1998, the general fishery GHL was 15.8 million pounds; the actual harvest was 14.3 million pounds. In 1999, the BOF made permanent those interim management measures adopted prior to the 1997 season. In 1999, the general fishery GHL was 10.1 million pounds; the actual harvest was 11.1 million pounds taken by 257 vessels in 5 days. The 2000 Area T red king crab general fishery GHL was set at 7.7 million pounds. A 244 vessel fleet harvested 7.55 million pounds in four days.

## REGULATIONS

Area T is an *exclusive* king crab registration area. Vessels that register and participate in this area may not participate in any other *exclusive* or *superexclusive* king crab registration areas during the king crab registration year, which runs from June 28 to June 27.

Specific regulations governing commercial king crab fishing in Area T begin with 5 AAC 34.800 DESCRIPTION OF REGISTRATION AREA T, in the Commercial Shellfish Fishing Regulation booklet. Some of the regulations are summarized below. This section does not include all regulations pertaining to the Bristol Bay red king crab registration area. Fishers are urged to obtain the latest commercial shellfish regulation booklet from an ADF&G office. For additional information on regulations pertaining to this fishery, contact the ADF&G office in Dutch Harbor or Kodiak. ADF&G contacts are listed under the ***Department Contacts*** section of this document.

### *Fishing Seasons, Pot Limits, and Legal Gear*

The Bristol Bay red king crab fishery opens annually at 4:00 p.m. on October 15, according to provisions of 5 AAC 34.810 (b) FISHING SEASONS FOR REGISTRATION AREA T. The area is closed by emergency order when the GHL is achieved or when indicators of stock condition, such as poor fishery performance or excessive bycatch of small or female crabs, indicate a closure is necessary to protect the long term health of the stock.

Pot limits implemented by the BOF in 1997 range from 60-200 pots for vessels equal to or less than 125' length overall and 75-250 pots for vessels greater than 125' length overall, depending on the GHL and the number of vessels registered for the fishery. These pot limit regulations are outlined in 5 AAC 34.825(h)(1-8) LAWFUL GEAR FOR REGISTRATION AREA T. To ensure compliance with pot limit regulations, the main or trailer buoy on each pot must display one fishery-specific identification tag for the current year according to 5 AAC 34.051 (b) and (c) KING CRAB GEAR MARKING REQUIREMENTS and 5 AAC 34.826 (a) KING CRAB POT MARKING REQUIREMENTS FOR REGISTRATION AREA T. All pots must be tagged at the time of tank inspection and remain tagged throughout the fishery. It is the responsibility of each vessel operator to ensure that all gear is tagged and that tags are affixed to the gear in a way which minimizes tag loss.

Buoy tags are available at a cost of $2.00 each from ADF&G offices in Dutch Harbor and Kodiak. Buoy tags for the Bristol Bay red king crab fishery are normally available beginning on the first

business day following the pre-season registration deadline. For the 2001 season, tags will be available beginning on September 25.

Buoy tags lost during the season may be replaced according to provisions of 5 AAC 34.826 (b) KING CRAB GEAR MARKING REQUIREMENTS FOR REGISTRATION AREA T. This regulation states that replacement of lost tags is permitted if the vessel operator and three crew members submit statements, in person, at the ADF&G office in Dutch Harbor, describing how tags were lost and listing the number of each lost tag.

Legal gear for the commercial red king crab fishery in Area T is limited to king crab pots that are no more than 10 feet long by 10 feet wide by 42 inches high with rigid tunnel eye openings that individually are no less than five inches in any one dimension with perimeters that are individually greater than 36 inches, or pots that are no more than 10 feet long by 10 feet wide by 42 inches high which taper inward from their base to a top consisting of one horizontal opening of any size. A complete description of legal gear for the Bristol Bay red king crab fishery is listed in 5 AAC 34.050 LAWFUL GEAR FOR KING CRAB. All gear must be marked and tagged according to 5 AAC 34.051 (a) KING CRAB GEAR MARKING REQUIREMENTS. In addition to these gear requirements, all pots fished for king crabs in Area T must have at least one-third of one vertical surface of the pot composed of not less than nine-inch stretched mesh webbing as required by 5 AAC 34.825(b) LAWFUL GEAR FOR REGISTRATION AREA T. All pots must also be equipped with a biodegradable escape mechanism as described in 5 AAC 39.145 ESCAPE MECHANISM FOR SHELLFISH AND BOTTOM FISH POTS.

### *Pre-season Registration, Registration, and Tank Inspections*

Pre-season registration is required for all vessels wishing to participate in Bristol Bay red king crab fishery. The annual pre-season registration deadline is 5:00 p.m. September 24 as outlined in 5 AAC 34.806(b) AREA T REGISTRATION.

In addition to vessel registration requirements with the Commercial Fisheries Entry Commission listed under 5 AAC 39.120 REGISTRATION OF COMMERCIAL FISHING VESSELS, a vessel used to take king crabs in Area T must first obtain a shellfish registration certificate from ADF&G according to provisions of 5 AAC 34.020 KING CRAB AREA REGISTRATION.

In order for the shellfish vessel registration to be valid, a catcher vessel must have all live tanks inspected by a department representative as specified in 5 AAC 34.030 INSPECTION REQUIREMENTS. In addition, catcher processor vessels must have all freezers and live tanks inspected. Dry tanked vessels do not require a tank inspection. Tank inspections are required to insure that vessels are not in possession of crabs prior to the start of a fishery. Vessels intending to participate in the Bristol Bay red king crab fishery are required to register and have their holds inspected in Dutch Harbor, Akutan, King Cove, or False Pass beginning 30 hours prior to the start of the season according to 5 AAC 34.840 REGISTRATION AREA T INSPECTION POINTS AND REQUIREMENTS.

To facilitate and speed the tank inspection and registration process, the department utilizes a “quick registration” procedure. Department staff in all tank inspection ports inspect live tanks and gear on vessels up to seven days prior to the 30 hour tank inspection period. If all gear on a vessel at the

time of the pre-tank inspection complies with registration area gear requirements and no live crabs are onboard, a pre-tank inspection certificate is issued to the operator of the vessel. Leaving port or placing gear on the vessel that is not in compliance with Area T gear requirements invalidates the pre-tank inspection certificate and the vessel is required to receive another tank inspection during the 30 hour tank inspection window. At any time during the 30 hour tank inspection window, operators of vessels that have received a pre-tank and gear inspection may proceed with pre-tank certificate, vessel registration form and Area T king crab interim use card to pre-designated quick registration locations to have the registration validated. Quick registration signing locations are announced during pre-tank inspections. Once a vessel registration has been validated, that vessel may proceed to the fishing grounds.

### *Operation of Other Gear and Stand Down Provisions*

Regulations adopted by the BOF in 2000 and found in 5 AAC 34.828. OPERATION OF OTHER GEAR IN REGISTRATION AREA T (1), state that a person or vessel that operates commercial, subsistence, personal use, or sport; pot, longline, or trawl gear in a non-pollock fishery, in that portion of Registration Area T, north of 55° 30' N lat., and east of 164° W long., during the 30 days immediately before the scheduled opening date of the commercial red king crab season, or operates trawl gear in a directed pollock fishery, in that portion of Registration Area T north of 55° 30' N lat., and east of 164° W long., during the 14 days immediately before the scheduled opening date of the commercial red king crab season, may not participate in the commercial red king crab fishery. Trawl catcher vessels delivering to the offshore sector and trawl catcher vessels that have 100 percent federal groundfish observer coverage in Registration Area T, north of 55° 30' N lat., and east of 164° W long., during the 14 days immediately before the scheduled opening date of the commercial red king crab season are exempt from this requirement.

### *Landing and Pot Storage Requirements*

As outlined in 5 AAC 34.841 LANDING REQUIREMENTS FOR REGISTRATION AREA T, vessels having fished for red king crabs in Registration Area T must arrive at their chosen processing location within 30 hours following the season closure if delivery is made to processors in Dutch Harbor, Akutan, or King Cove. Vessels delivering to ports east of King Cove may request additional running time to transit directly to the processing location by contacting ADF&G in Dutch Harbor within the 30 hours following the closure.

During a closed season, king crab pots must be removed from the water. However, according to 5 AAC 34.827 KING CRAB POT STORAGE REQUIREMENTS FOR REGISTRATION AREA T, king crab pots may be stored with doors secured fully open and bait containers removed in waters north of 57° N lat., south of 58° N lat., east of 166° W long., and west of 164° W long. In addition, pots with doors secured fully open and bait containers removed may be stored in Registration Area T for up to 10 days following the closure of the king crab fishery. Additional provisions of this section allow baited pots to be stored on the fishing grounds in Registration Area T for up to 10 days following a closure if the registration area is closed with less than 24 hours advance notice.

### *Legal Size Limits*

The legal minimum size of red king crabs that may be harvested in Registration Area T is six and one-half inches (165 mm) carapace width as outlined in 5 AAC 34.820 SIZE LIMITS FOR REGISTRATION AREA T. Only male crabs can be legally harvested. All other animals taken incidentally must be immediately returned, unharmed, to the sea.

### *American Fisheries Act Vessel Management Sideboards*

Vessels endorsed under the American Fisheries Act (AFA) for the Bristol Bay red king crab fishery will be managed under the AFA Management Plan outlined in 5 AAC 39.695. AMERICAN FISHERIES ACT MANAGEMENT PLAN FOR THE BERING SEA AND BRISTOL BAY CRAB FISHERIES. This management plan includes preseason vessel registration, observer coverage as required by the department, and other conditions the commissioner of ADF&G determines necessary for management of the fishery. This management plan also specifies that ADF&G will manage AFA vessels with a harvest cap of the general fishery GHL, either equally apportioned between all AFA qualified vessels or through a cooperative fishery when 100 percent of AFA qualified participants agree to the cooperative. Also as specified in the management plan, each AFA vessel will be required to be capable of reporting via radio or marine telex to the department as often as each 12 hours throughout the fishery. If the cooperative fishery is prosecuted, the AFA vessels will report directly to a fleet manager selected and employed by the cooperative group, who in turn will work with department personnel to insure that the AFA cap is not exceeded.

### *Onboard Observer Program*

In addition to the pay-as-you-go mandatory observer coverage on at-sea processors, regulations implemented by the BOF in 1999 allow for placement of observers on catcher vessels. The department will be placing observers on approximately 10 percent of the catcher vessels in the Bristol Bay red king crab fishery, the cost of these observers will be paid with funds generated by cost recovery fishing for Bristol Bay red king crabs. Vessels will be selected at random after the pre-season registration deadline. Selected vessels will be notified within several days of the pre-season registration deadline. Observers will not be placed on vessels less than 75 feet overall length. For additional information on the observer program, contact Mary Schwenzfeier (listed on appendix A).

## HARVEST STRATEGY

The harvest strategy developed for Bristol Bay red king crabs is outlined under 5 AAC 34.816 BRISTOL BAY RED KING CRAB HARVEST STRATEGY. The harvest strategy establishes a minimum abundance threshold of 8.4 million mature female crabs and an effective spawning biomass (ESB) of at least 14.5 million pounds before a fishery is allowed. Effective spawning biomass is defined as the estimated biomass of mature female red king crabs that the population of mature male red king crabs can successfully mate in a given year. This harvest strategy also

establishes an exploitation rate of 15% on mature male crabs if the ESB is above 55 million pounds. If the ESB falls below 55 million pounds the exploitation rate on mature male crabs is reduced to 10%.

The red king crab GHL for Registration Area T is calculated based on population estimates derived from a length based model (LBA) developed by ADF&G (Zheng et al. 1995). The LBA utilizes data collected during the National Marine Fisheries Service (NMFS) trawl survey of the Eastern Bering Sea, during port sampling of the catch and observer data. NMFS survey results are presented annually in an Alaska Fisheries Science Center report. Determination of the red king crab GHL is normally complete and made available to the public by ADF&G news release prior to August 31. News releases are faxed or electronically mailed to all major processor and industry groups active in the Bering Sea crab fisheries and are available on the World Wide Web at www.cf.adfg.state.ak.us.

## FISHERIES MANAGEMENT AND VOLUNTEER CATCH REPORTING

The Bristol Bay red king crab fishery has historically been managed inseason. However, if the GHL is unusually low and/or the number of vessels participating relatively high, a fishery closure could be determined based on the total number of participants and historic fishery performance. In these situations the closure would be announced to the fleet shortly after the fishery begins, once total effort could accurately be determined. A closure announcement would be broadcast to the fleet over single side band (SSB) radio frequency 4125 kHz, faxed and electronically mailed to all major processors and industry groups.

Inseason management is the preferred option, however, and is accomplished by means of voluntary daily catch reports from participating vessel operators. These reports, sent by marine satellite telex (each 12 hours) or single side band radio (each 24 hours), are processed daily by department staff in Dutch Harbor. Vessel operators report number of pots hauled and number of legal crabs harvested for a predetermined 12 or 24 hour reporting period. Inseason management allows fishery managers to base decisions on actual, real-time fishery performance and weather conditions. The operator of any registered vessel may participate in the voluntary inseason catch reporting program and all vessel operators are asked to participate at the time of tag purchase, registration and/or tank inspection. Inseason information is used to monitor the daily harvest and to calculate a daily catch rate to project the date and time of the fishery closure. Once determined, the closure is announced to the fishing fleet over SSB radio frequency 4125 kHz, faxed and electronically mailed to all major processors and industry groups. Catch reporting is essential to successful management of this fishery and fishers are strongly encouraged to participate. All catch reports are maintained under the strictest confidentiality.

## GUIDELINE HARVEST LEVEL AND OUTLOOK FOR THE 2001 FISHERY

The LBA analysis for 2001 indicates that the Bristol Bay red king crab population is above the minimum stock size threshold (MSST) of 44.8 million pounds of total mature biomass (TMB) at 88.0 million pounds TMB. Mature female abundance was estimated to be 21.2 million crabs, a slight increase from the 2000 abundance of 19.0 million crabs. Effective spawning biomass (ESB) was estimated to 40.6 million pounds, a slight increase from the 2000 ESB of 40.2 million pounds. Given an ESB of less than 55 million pounds, the exploitation rate was set at 10% of the mature male population. Mature male abundance was estimated to be nearly 11.0 million crabs, thus the total GHL was set at 7.15 million pounds, a decrease from the 2000 total GHL of 8.35 million pounds. Of this total, 6,613,750 pounds are available to the general fishery and the remaining 536,250 pounds are set aside for the Community Development Quota (CDQ) fishery. The AFA fleet will be capped at 10.96% (724,867 pounds) of the general fishery GHL.

The 2001 Bristol Bay season begins at 4:00 p.m. on October 15. The fishery will open as scheduled provided that pre-season consultations between the department, National Weather Service (NWS) and United States Coast Guard (USCG) indicate that weather conditions immediately preceding and during the early portion of the fishery will allow USCG personnel to successfully launch rescue aircraft. Given catch rates observed in recent seasons, the fishery is expected to last up to five days. Catch updates and the closure announcement will be provided to fishers via single side band radio on frequency 4125 kHz. Fishers should monitor that frequency while the fishery is open as updates could occur at any time and the time interval between the closure announcement and the fishery closure could be relatively short.

## DEPARTMENT CONTACTS

Contacts for ADF&G in Dutch Harbor are Forrest R. Bowers, Area Management Biologist; Mike Cavin, Fishery Biologist and Mary Schwenzfeier, Shellfish Observer Program Coordinator. The ADF&G phone number in Dutch Harbor is (907) 581-1239, and the fax number is (907) 581-1572.

Department contacts in Kodiak are Wayne Donaldson, Regional Shellfish/Groundfish Management Biologist; Dave Jackson, Kodiak Island/Alaska Peninsula Area Shellfish/ Groundfish Management Biologist; and Mike Ruccio, Assistant Area Shellfish/Groundfish Biologist. The ADF&G phone number in Kodiak is (907) 486-1840, and the fax number is (907) 486-1824.

A complete listing of contact persons by agency and location is listed in Appendix A.

## LITERATURE CITED

Zheng, J., M.C. Murphy, and G.H. Kruse. 1995. A length-based population model and stock-recruitment relationships for red king crab, *Paralithodes camtschaticus,* in Bristol Bay, Alaska. Canadian Journal of Fisheries and Aquatic Sciences 52: 1229-1246.

Table 1. Bristol Bay commercial red king crab catch statistics, 1966-2000.

| Year | Number of Vessels | Number of Landings | Number of Crabs[a] | Harvest[a] (pounds) | Number of Pots Registered | Number of Pots Pulled | CPUE[b] | Deadloss (pounds) |
|---|---|---|---|---|---|---|---|---|
| 1966 | 9 | 15 | 140,554 | 997,321 | | 2,720 | 52 | |
| 1967 | 20 | 61 | 397,307 | 3,102,443 | | 10,621 | 37 | |
| 1968 | 59 | 261 | 1,278,592 | 8,686,546 | | 47,496 | 27 | |
| 1969 | 65 | 377 | 1,749,022 | 10,403,283 | | 98,426 | 18 | |
| 1970 | 51 | 309 | 1,682,591 | 8,559,178 | | 96,658 | 17 | |
| 1971 | 52 | 394 | 2,404,681 | 12,955,776 | | 118,522 | 20 | |
| 1972 | 64 | 611 | 3,994,356 | 21,744,924 | | 205,045 | 19 | |
| 1973 | 67 | 441 | 4,825,963 | 26,913,636 | | 194,095 | 25 | N/A |
| 1974 | 104 | 605 | 7,710,317 | 42,266,274 | | 212,915 | 36 | N/A |
| 1975 | 102 | 592 | 8,745,294 | 51,326,259 | | 205,096 | 43 | 1,639,483 |
| 1976 | 141 | 984 | 10,603,367 | 63,919,728 | | 321,010 | 33 | 875,327 |
| 1977 | 130 | 1,020 | 11,733,101 | 69,967,868 | | 451,273 | 26 | 730,279 |
| 1978 | 162 | 926 | 14,745,709 | 87,618,320 | | 406,165 | 36 | 1,273,037 |
| 1979 | 236 | 889 | 16,808,605 | 107,828,057 | | 315,226 | 53 | 3,555,891 |
| 1980 | 236 | 1,251 | 20,845,350 | 129,948,463 | 78,352 | 567,292 | 37 | 1,858,668 |
| 1981 | 177 | 1,026 | 5,307,947 | 33,591,368 | 75,756 | 542,250 | 10 | 711,289 |
| 1982 | 90 | 255 | 541,006 | 3,001,210 | 36,166 | 141,656 | 4 | 95,834 |
| 1983 | NO COMMERCIAL FISHERY | | | | | | | |
| 1984 | 89 | 137 | 794,040 | 4,182,406 | 21,762 | 112,556 | 7 | 35,601 |
| 1985 | 128 | 130 | 796,181 | 4,174,953 | 30,117 | 85,003 | 9 | 6,436 |
| 1986 | 159 | 230 | 2,099,576 | 11,393,934 | 32,468 | 178,370 | 12 | 284,127 |
| 1987 | 236 | 311 | 2,122,402 | 12,289,067 | 63,000 | 220,871 | 10 | 120,388 |
| 1988 | 200 | 201 | 1,236,131 | 7,387,795 | 50,099 | 153,004 | 8 | 23,537 |
| 1989 | 211 | 287 | 1,684,706 | 10,264,791 | 55,000 | 208,684 | 8 | 81,334 |
| 1990 | 240 | 331 | 3,120,326 | 20,362,342 | 69,906 | 262,131 | 12 | 116,527 |
| 1991 | 302 | 324 | 2,630,446 | 17,177,894 | 89,068 | 227,555 | 12 | 119,670 |
| 1992 | 281 | 289 | 1,196,958 | 8,043,018 | 68,189 | 205,940 | 6 | 9,000 |
| 1993 | 292 | 361 | 2,261,287 | 14,628,639 | 58,881 | 253,794 | 9 | 133,442 |
| 1994 | NO COMMERCIAL FISHERY | | | | | | | |
| 1995 | NO COMMERCIAL FISHERY | | | | | | | |
| 1996 | 196 | 198 | 1,249,005 | 8,405,614 | 39,461 | 76,433 | 16 | 24,166 |
| 1997 | 256 | 265 | 1,315,969 | 8,756,490 | 27,499 | 90,510 | 15 | 13,771 |
| 1998 | 274 | 284 | 2,140,607 | 14,233,063 | 56,420 | 141,707 | 15 | 53,716 |
| 1999 | 257 | 268 | 1,812,403 | 11,090,930 | 42,403 | 146,997 | 12 | 44,132 |
| 2000 | 246 | 256 | 1,166,796 | 7,546,145 | 26,352 | 98,694 | 12 | 76,283 |

[a]General fishery only. Deadloss included.

[b]Number of legal crabs per pot pull.

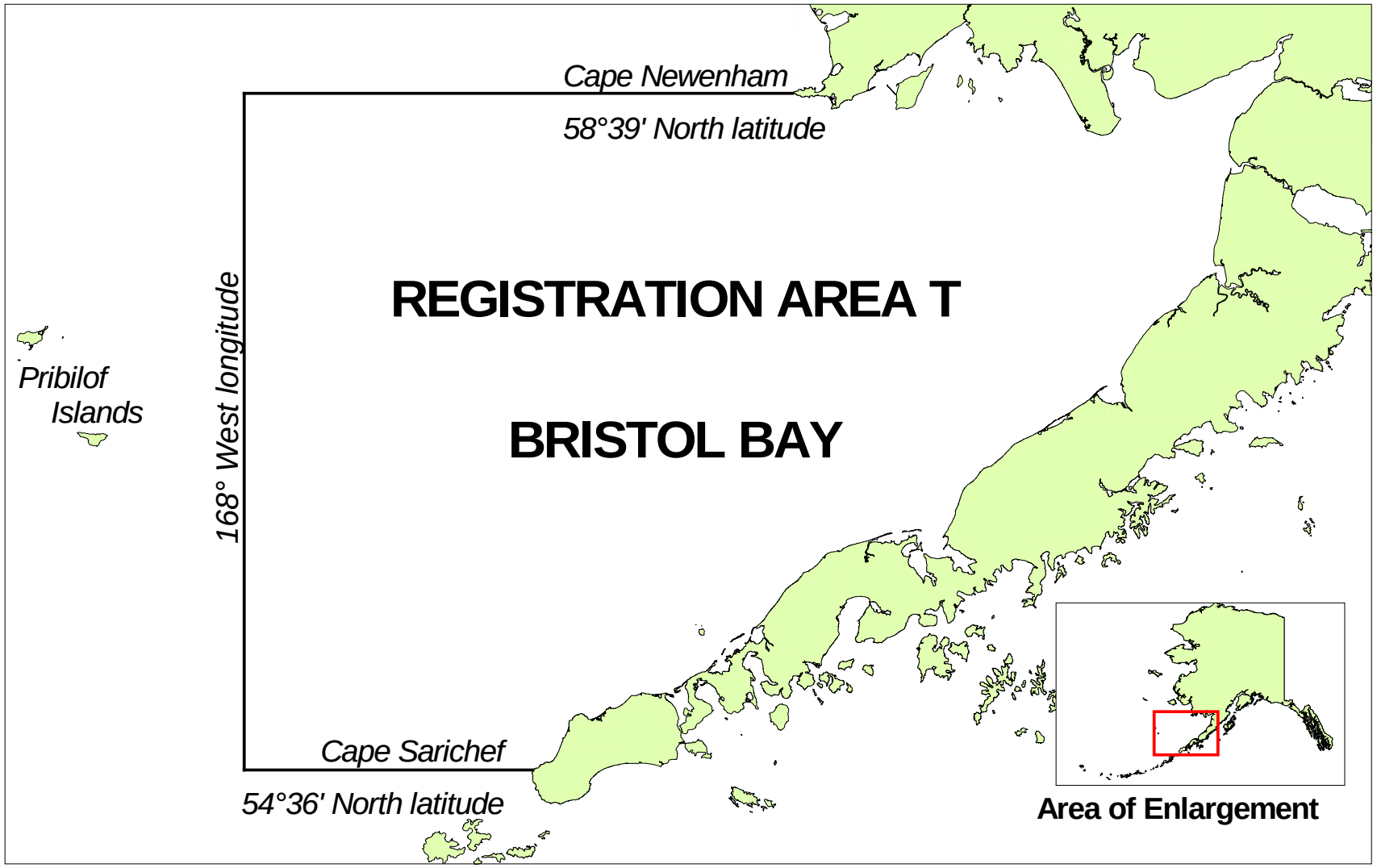


Figure 1. King crab Registration Area T.

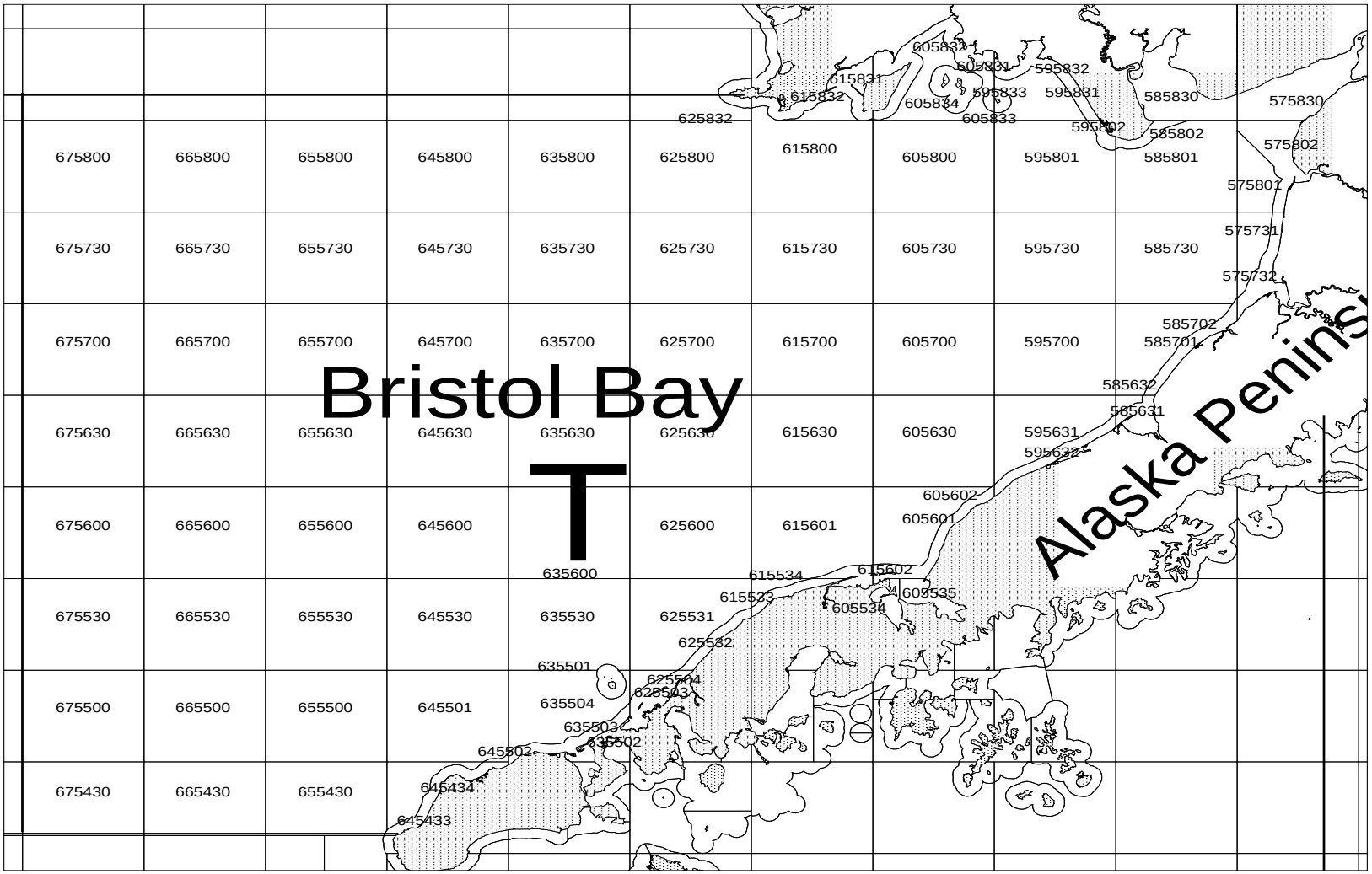


Figure 2. Statistical area map of king crab Registration Area T.

# APPENDIX

Appendix A. List of contact persons, by agency and location.

**Alaska Department of Fish and Game** Web site**:** http://www.cf.adfg.state.ak.us/region4/shellfsh/shelhom4.htm

Dutch Harbor office

| | | | | |
|---|---|---|---|---|
| *Mail address:* | PO Box 920587<br>Dutch Harbor, Alaska 99692 | *Physical address:* | 2315 Airport Beach Rd. Suite 207<br>Dutch Harbor, Alaska 99692 | Phone: (907) 581-1239<br>FAX: (907) 581-1572 |

| | | |
|---|---|---|
| Forrest R. Bowers | Bering Sea/Aleutian Islands Area Biologist | forrest_bowers@fishgame.state.ak.us |
| Mike Cavin | Fishery Biologist | michael_cavin@fishgame.state.ak.us |
| Mary Schwenzfeier | Shellfish Observer Program Coordinator | mary_schwenzfeier@fishgame.state.ak.us |

Kodiak office

| | | | | |
|---|---|---|---|---|
| *Mail address*: | 211 Mission Rd.<br>Kodiak, Alaska 99615 | *Physical address:* | 211 Mission Rd<br>Kodiak, Alaska 99615 | Phone: (907) 486-1840<br>FAX: (907) 486-1824 |

| | | |
|---|---|---|
| Wayne Donaldson | Westward Region Shellfish/Groundfish Biologist | wayne_donaldson@fishgame.state.ak.us |
| Dave Jackson | Kodiak, Chignik, Alaska Peninsula Area Shellfish/Groundfish Biologist | dave_jackson@fishgame.state.ak.us |
| Mike Ruccio | Kodiak, Chignik, Ak. Pen. Assistant Area Shellfish/Groundfish Biologist | mike_ruccio@fishgame.state.ak.us |

**Alaska State Troopers Division of Fish and Wildlife Protection** Web site: http://www.dps.state.ak.us

Dutch Harbor Post

| | | | | |
|---|---|---|---|---|
| *Mail address:* | PO Box 920848<br>Dutch Harbor, Alaska 99692 | *Physical address:* | 2315 Airport Rd. Suite 106<br>Dutch Harbor, Alaska 99692 | Phone: (907) 581-1432<br>FAX: (907) 581-1407 |

| | | |
|---|---|---|
| Jon Streifel | Trooper | jon_streifel@dps.state.ak.us |

Kodiak Post

| | | | | |
|---|---|---|---|---|
| *Mail address:* | 2921 A Mill Bay Road<br>Kodiak, Alaska 99615 | *Physical address:* | 2921 A Mill Bay Road<br>Kodiak, Alaska 99615 | Phone: (907) 486-4761<br>FAX : (907)486-1707 |

| | | |
|---|---|---|
| Joanna Roop | PostLieutenant | joanna_roop@dps.state.ak.us |

-Continued-

**National Marine Fisheries Service** Web site: http://www.fakr.noaa.gov/

Dutch Harbor enforcement office

| | | | | |
|---|---|---|---|---|
| *Mail address:* | PO Box 920368<br>Dutch Harbor, Alaska 99692 | *Physical address:* | 2315 Airport Beach Rd Suite 103<br>Dutch Harbor, Alaska 99692 | Phone: (907) 581-2061<br>FAX : (907) 581-2064 |

| | | |
|---|---|---|
| Michael Mahaffey | Assistant Special Agent in Charge | mike.mahaffey@noaa.gov |

Dutch Harbor management office

| | | | | |
|---|---|---|---|---|
| *Mail address:* | P. O. Box 920225<br>Dutch Harbor, Alaska 99692 | *Physical address:* | 2315 Airport Beach Rd. Suite 103<br>Dutch Harbor, Alaska 99692 | Phone: (907) 581-2062<br>FAX : (907) 581-3356 |

| | | |
|---|---|---|
| Rance Morrison | Fisheries Biologist | rance.morrison@noaa.gov |